GREENWOOD, S.C.
COMMISSIONERS OF PUBLIC WORKS
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Generally speaking, all comments will address the four core recommendations as outlined in the report. Those recommendations are: 1) the formation of a task force to evaluate the voluntary adoption of practices comparable to those in Texas; 2) collaboration among and between electric and natural gas utility providers to develop emergency preparedness and operating practice guidelines; 3) participation in adverse winter weather emergency drills; and 4) an assessment of the interdependencies between electric power and other key infrastructure.

**General Comments Affecting the Electric Power and Natural Gas Systems**

1) As stated in Section 2.3 of the Final Report on the Resiliency of South Carolina's Electric and Natural Gas Infrastructure Against Extreme Winter Storm Events, South Carolina is materially different than Texas in that South Carolina has many electric grid interconnections that allow for diversity/reliability during extreme weather events. Texas is largely isolated from the grid and this hinders the ability for additional resources during extreme events. Since a large majority of the electric power and natural gas providers are distribution utilities with no generation and transmission resources, it seems that the adoption of practices comparable to those in Texas would be laborious and counterproductive to these smaller companies. Typically, distribution utilities have no control over the generation and transmission of energy outside of the contracts in place with their suppliers. Therefore, the concern arises that valuable resources for operating the system and providing improvements for sustainability would be diverted away from the physical system to establishing standards that may or may not impact the local utility's ability to weather the storm event since it is only a distributor of the resource. If the resource isn't supplied to the gate station or substation, no amount of additional standards will ensure the end customer receives energy (as was stated in the report).

   Additionally, natural gas companies in the State of South Carolina are already regulated by the ORS and PHMSA which require emergency, transmission, and distribution operating manuals that address extreme weather conditions and other threats to the gas system. Electric power providers follow the standards as set forth in the National Electric Safety Code (NESC). The American Public Power Association has a special designation for those that meet stringent requirements for reliable power. Greenwood CPW is one of several municipal electric utilities throughout the state that have met the Reliable Public Power (RP3) designation. As a whole, municipal power utilities' have performed better than Cooperatives and IOU's in reliability indices as shown on the attached charts. This can partially be attributed to the urban nature of a municipal power

system; however, it does point to the dependability of the local power system in times of adverse weather.

| National Data | | 2020 | | | | Units |
|---|---|---|---|---|---|---|
| Number of Utilities Submitting Data Nationally: | | All | Coop | IOU | Public Power | |
| | | 948 | 454 | 175 | 319 | |
| **National Reliability Metrics (IEEE Standard)** | | **All** | **Coop** | **IOU** | **Public Power** | |
| **Average of SAIDI With MED (IEEE)** | | 391.57 | 474.63 | 462.36 | 209.60 | Minutes |
| **Average of SAIDI Without MED (IEEE)** | | 135.78 | 170.16 | 130.46 | 79.72 | Minutes |
| **Average of SAIFI With MED (IEEE)** | | 1.62 | 1.98 | 1.53 | 1.16 | Interruptions |
| **Average of SAIFI Without MED (IEEE)** | | 1.22 | 1.51 | 1.12 | 0.85 | Interruptions |
| **Average of CAIDI With MED (IEEE)** | | 188.51 | 193.02 | 249.70 | 139.89 | Minutes |
| **Average of CAIDI Without MED (IEEE)** | | 103.80 | 109.53 | 114.86 | 86.43 | Minutes |

| State Data | | | | | | |
|---|---|---|---|---|---|---|
| **Pick a State to Evaluate Reliability Data:** | SC | **<-click on this box to select a state** | | | | |
| | | 2020 | | | | Units |
| **Number of Utilities Submitting Data in This State:** | | **All** | **Coop** | **IOU** | **Public Power** | |
| | | 26 | 18 | 3 | 5 | |
| **Reliability Metrics (IEEE Standard)** | | **All** | **Coop** | **IOU** | **Public Power** | |
| **Average of SAIDI With MED (IEEE)** | | 288.22 | 291.11 | 385.97 | 176.01 | Minutes |
| **Average of SAIDI Without MED (IEEE)** | | 130.94 | 140.64 | 138.06 | 75.26 | Minutes |
| **Average of SAIFI With MED (IEEE)** | | 1.65 | 1.72 | 1.61 | 1.49 | Interruptions |
| **Average of SAIFI Without MED (IEEE)** | | 1.31 | 1.44 | 1.24 | 1.01 | Interruptions |
| **Average of CAIDI With MED (IEEE)** | | 143.45 | 127.70 | 226.59 | 107.53 | Minutes |
| **Average of CAIDI Without MED (IEEE)** | | 88.40 | 85.94 | 112.16 | 72.02 | Minutes |

2) At first glance, Greenwood CPW supports the collaboration among electric providers and natural gas providers to develop emergency and operating guidelines where practical. Since each system is different in size, operation, and demographics a one size fits all approach may not be possible. However, Greenwood CPW definitely sees the benefit in applying best practices where applicable. Many of the distribution systems are not large enough to justify automation and the latest technology suggested in the report. Since the report confirmed that the current acceptable standards required and in place are being met, it appears that the cost to our end customers may not be prudent for the benefit they would receive. Therefore, Greenwood CPW would not be in favor of any mandatory requirements/guidelines above and beyond what is already required.

3) Greenwood CPW supports the idea of participation in adverse winter weather emergency drills. We do think this would be most beneficial when performed at the local utility level with those that have direct impact on the system instead of a state-wide generic exercise. As a member of SCAMPS, Greenwood CPW participates in the Mutual Aid Assistance Program and we have a manual that sets forth the conditions for how the program functions when needed.

4) Greenwood CPW has no objection to learning more about the interdependencies between electric power and other key infrastructure. However, the idea of curtailing natural gas powered electric generating facilities to provide residential heat to other customers does not seem prudent. Without the blower motors powered by electricity, the gas units in customers' homes will not be able to function. Therefore, if this type of curtailment occurred, no one would have heat during these extreme events. Furthermore, with the political landscape against coal and nuclear power at this time, most generating facilities have had to rely on natural gas as a cost-effective way to produce electricity.

Thank you for soliciting feedback on this comprehensive report. It is Greenwood CPW's desire and wish to be able to continuing providing comments and have dialogue among all before any proposed regulations are enacted.